GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: March 7, 2005, 06:55:26 ; Search time 106.895 Seconds
(without alignments)
919.008 Million cell updates/sec

Title: US-09-939-537-33
Perfect score: 1385
Sequence: 1 EPKSCDKTHTCPPCPAPELL.....DETCAEAQDGELDGLWTTDP 254

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1385	100.0	254	2	AAR89441	Aar89441 IgG1 hing
2	1379	99.6	254	2	AAR78667	Aar78667 IgG1 hing
3	1358	98.1	400	7	ADD13790	Add13790 Plasmid p
4	1356	97.9	544	8	ADR66914	Adr66914 Human pro
5	1356	97.9	544	8	ADR66016	Adr66016 Human pro
6	1350	97.5	539	8	ADR10009	Adr10009 Human pro
7	1345.5	97.1	401	7	ADD13781	Add13781 Plasmid p
8	1271	91.8	441	3	AAB28692	Aab28692 Fc-huAGP-
9	1266	91.4	448	3	AAB28694	Aab28694 Fc-muAGP-
10	1265	91.3	577	8	ADR10259	Adr10259 Human pro
11	1263	91.2	502	8	ADM97493	Adm97493 CD1d-IgG-
12	1260	91.0	581	4	AAB81972	Aab81972 Gangliosi
13	1260	91.0	582	4	AAB81987	Aab81987 Gangliosi
14	1260	91.0	582	4	AAB81991	Aab81991 Gangliosi
15	1260	91.0	583	4	AAB83156	Aab83156 Gangliosi
16	1259.5	90.9	697	8	ADQ07403	Adq07403 hCBE11/hB
17	1259.5	90.9	697	8	ADQ12180	Adq12180 Heavy cha
18	1258	90.8	232	2	AAW26232	Aaw26232 Human IgG
19	1258	90.8	232	3	AAB28690	Aab28690 Human IgG
20	1258	90.8	232	4	AAB80897	Aab80897 Human IgG
21	1258	90.8	232	4	AAY72915	Aay72915 Human par
22	1258	90.8	232	5	AAE15347	Aae15347 Human imm
23	1258	90.8	232	5	AAE26272	Aae26272 Human IgG
24	1258	90.8	232	7	ADJ65991	Adj65991 Herpes vi
25	1258	90.8	232	8	ADJ57512	Adj57512 Human IgG
26	1258	90.8	232	8	ADR48992	Adr48992 Human IgG
27	1258	90.8	233	5	ABB09463	Abb09463 Human IgG
28	1258	90.8	235	6	ABJ38647	Abj38647 pCXFc pro
29	1258	90.8	235	6	ADA89055	Ada89055 Plasmid p
30	1258	90.8	235	7	ADD25647	Add25647 Binding d
31	1258	90.8	235	7	ADG74307	Adg74307 Fibroblas
32	1258	90.8	247	5	AAE26274	Aae26274 Human bet
33	1258	90.8	251	5	ABB81490	Abb81490 Human imm
34	1258	90.8	251	6	AAE35214	Aae35214 Human wil
35	1258	90.8	259	2	AAY24154	Aay24154 Protein f
36	1258	90.8	259	6	ABU07704	Abu07704 Viral coa
37	1258	90.8	267	5	AAE26273	Aae26273 Human tPA
38	1258	90.8	269	8	ADJ52120	Adj52120 CH1 delet
39	1258	90.8	287	4	AAB47590	Aab47590 Fusion pr
40	1258	90.8	329	2	AAR91806	Aar91806 Human imm
41	1258	90.8	329	8	ADP56389	Adp56389 Human PRO
42	1258	90.8	329	8	ADS85004	Ads85004 Human ato
43	1258	90.8	329	8	ADS82579	Ads82579 Human IgG
44	1258	90.8	330	4	AAB04071	Aab04071 Zcytor 10
45	1258	90.8	330	5	AAM47856	Aam47856 Human Ig-

ALIGNMENTS

RESULT 1
AAR89441
ID AAR89441 standard; peptide; 254 AA.
XX
AC AAR89441;
XX
DT 26-SEP-1996 (first entry)
XX
DE IgG1 hinge, CH2 and CH3 domains.
XX
KW CD7; transmembrane domain; chimeric receptor; CD5; CD34; CH2; CH3; IgG1;
KW human; CD4; HIV; proteinaceous alpha-helix; T cell; B cell; neutrophil;
KW dendritic cell; therapy; mammal; infection.
XX
OS Homo sapiens.
XX
PN WO9603883-A1.
XX
PD 15-FEB-1996.
XX
PF 26-JUL-1995; 95WO-US009468.
XX
PR 02-AUG-1994; 94US-00284391.
PR 24-FEB-1995; 95US-00394388.
XX
PA (GEHO) GEN HOSPITAL CORP.
XX
PI Seed B, Banapour B, Romeo C, Kolanus W;
XX
DR WPI; 1996-129034/13.
DR N-PSDB; AAT10780.
XX
PT Membrane-bound chimeric receptor comprising extracellular portion
PT including CD4 fragment - cells expressing receptor can be used for
PT treatment of HIV infection.
XX
PS Claim 3; Fig 25; 134pp; English.
XX
CC This sequence represents the human IgG1 hinge, CH2 and CH3 domains. This
CC sequence is included in the membrane bound proteinaceous chimeric
CC receptor of the invention. Alternatively the transmembrane region of the
CC chimeric receptor contains a portion of the CD7, CD5 or CD34
CC transmembrane domains. The extracellular portion of the chimeric receptor
CC contains a fragment of CD4 (amino acids 1-394 or 1-200 of the CD4
CC sequence) which specifically recognises and binds HIV-infected cells, but
CC does not mediate HIV infection. The extracellular domain of the receptor
CC is separated from the cell membrane by 48 or 72 angstroms, or by one or
CC more proteinaceous alpha-helices. The cells expressing the receptor are

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CC   preferably T cells, B cells, neutrophils, or dendritic cells. The
CC   therapeutic cells expressing the chimeric receptor are administered to a
CC   mammal to treat HIV infection
XX
SQ   Sequence 254 AA;

  Query Match             100.0%;  Score 1385;  DB 2;  Length 254;
  Best Local Similarity   100.0%;  Pred. No. 1.4e-96;
  Matches  254;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240

Qy        241 AQDGELDGLWTTDP 254
              ||||||||||||||
Db        241 AQDGELDGLWTTDP 254


RESULT 2
AAR78667
ID   AAR78667 standard; protein; 254 AA.
XX
AC   AAR78667;
XX
DT   11-APR-1996  (first entry)
XX
DE   IgG1 hinge, CH2 and CH3 domains.
XX
KW   Chimeric receptor; CD4; T-cell receptor; HIV; cytolysis;
KW   human immunodeficiency virus; adoptive immunotherapy; IgG1.
XX
OS   Homo sapiens.
XX
PN   WO9521528-A1.
XX
PD   17-AUG-1995.
XX
PF   12-JAN-1995;   95WO-US000454.
XX
PR   14-FEB-1994;   94US-00195395.
PR   02-AUG-1994;   94US-00284391.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Seed B,  Banapour B,  Romeo C,  Kolanus W;
XX
DR   WPI; 1995-292893/38.
DR   N-PSDB; AAQ96101.
XX
PT   Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing
PT   cells.
XX
PS   Claim 3; Fig 25; 118pp; English.
XX
CC   Human IgG1 hinge, CH2 and CH3 domains (AAR78668) are used in the
CC   construction of a chimeric receptor utilised in the targeted cytolysis of
CC   HIV-infected cells. The chimeric receptor comprises the extracellular
CC   domain (pref. amino acids 1-394 or 1-200) of CD4 linked via the CD7
CC   transmembrane domain to an intracellular portion, e.g. of T-cell receptor
CC   protein zeta. The IgG1 portion of the chimeric receptor is encoded by the
CC   DNA sequence given in AAQ96101
XX
SQ   Sequence 254 AA;

  Query Match             99.6%;  Score 1379;  DB 2;  Length 254;
  Best Local Similarity   99.6%;  Pred. No. 4e-96;
  Matches  253;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              |||||||||||||||||||||||||||||||||||||||||||||| ||||||||||
Db         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSKKALPAPIEKT 120

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240

Qy        241 AQDGELDGLWTTDP 254
              ||||||||||||||
Db        241 AQDGELDGLWTTDP 254


RESULT 3
ADD13790
ID   ADD13790 standard; protein; 400 AA.
XX
AC   ADD13790;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Plasmid pBS loxP-IgG1/pBS loxP-IgG1delta350/pBS loxPIgGdeltaCH1 protein.
XX
KW   library; transfection; humanized monoclonal antibody; antigen;
KW   T cell receptor; circular.
XX
OS   Synthetic.
OS   Homo sapiens.
OS   Mus sp.
XX
FH   Key             Location/Qualifiers
FT   Region          1. .97
FT                   /note= "Human IgG1 CH3"
FT   Region          98. .112
FT                   /note= "Human IgG1 hinge"
FT   Region          113. .222
FT                   /note= "human IgG1 CH2"
FT   Region          223. .329
FT                   /note= "Human IgG1 CH3"
FT   Region          330. .373
FT                   /note= "Murine IgG1 M1"
FT   Region          374. .400
FT                   /note= "Murine IgG2 M2"
XX
PN   EP1298207-A1.
XX
PD   02-APR-2003.
XX
PF   01-OCT-2001; 2001EP-00123596.
XX
PR   01-OCT-2001; 2001EP-00123596.
XX
PA   (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
XX
PI   Breitling F,  Moldenhauer G,  Poustka A,  Kuehlwein T;
XX
DR   WPI; 2003-383833/37.
```

XX
PT Preparing library of protein-producing eukaryotic cells, useful for
PT producing humanized high-affinity antibodies, comprises introducing
PT specific recombination signals into chromosomal gene loci and integrating
PT a variety of DNA sequences.
XX
PS Example 19; Fig 16; 75pp; German.
XX
CC This invention describes a novel method of preparing a library of protein
CC -producing eukaryotic cells comprising (a) introducing specific
CC recombination signals into one or two chromosomal gene loci, (b)
CC Expanding at least one of the modified cells, (c) Transfecting many
CC different DNA sequences, each flanked by recombination signals, into the
CC expanded cells and (d) Integrating the DNA sequences into the gene loci
CC on the basis of the recombination signals and the appropriate
CC recombinase. The resulting cells express different proteins, each from an
CC integrated DNA sequence and the proteins are bound to the cell surface.
CC The method is particularly used to produce libraries of humanized
CC monoclonal antibodies, for selection of those with affinity for
CC particular antigens and useful for diagnostic or therapeutic use.
CC Libraries of T cell receptors may also be prepared. The method produces
CC libraries of high diversity; provides easy, quick and automatable
CC selection from a large number of proteins, allows relatively simple
CC alteration of the expressed gene (e.g. fusion to other protein-coding
CC sequences), is suitable for large scale protein production and allows
CC simple verification and characterization of selected cell lines. The
CC method does not require incorporation of a resistance marker. This
CC sequence represents the construct pBS loxP-IgG1/pBS loxP-IgG1delta350/pBS
CC loxPIgGdeltaCH1 described in the disclosure of the invention.
XX
SQ Sequence 400 AA;

Query Match 98.1%; Score 1358; DB 7; Length 400;
Best Local Similarity 98.8%; Pred. No. 2.7e-94;
Matches 251; Conservative 1; Mismatches 0; Indels 2; Gaps 1;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||:||||||||||||||||||
Db         98 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPQVTCVVVDVSHEDPEVKF 157

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        158 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 217

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 277

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP--GLQLDETC 238
              |||||||||||||||||||||||||||||||||||||||||||||||||  ||||||||
Db        278 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGLQLDETC 337

Qy        239 AEAQDGELDGLWTT 252
              ||||||||||||||
Db        338 AEAQDGELDGLWTT 351
```

RESULT 4
ADR66914
ID ADR66914 standard; protein; 544 AA.
XX
AC ADR66914;
XX
DT 02-DEC-2004 (first entry)
XX
DE Human prostatic carcinoma derived DNA SEQ ID 212 #4.
XX
KW human; cytostatic; diagnosis; prostatic cancer;
KW differential expression analysis.
XX
OS Homo sapiens.
XX
PN WO2004076614-A2.
XX
PD 10-SEP-2004.
XX
PF 22-FEB-2004; 2004WO-DE000433.
XX
PR 27-FEB-2003; 2003DE-01009985.
PR 14-MAY-2003; 2003DE-01022134.
XX
PA (HINZ/) HINZMANN B.
PA (DAHL/) DAHL E.
PA (ROSE/) ROSENTHAL A.
PA (HERM/) HERMANN K.
PA (PILA/) PILARSKY C.
XX
PI Hinzmann B, Dahl E, Rosenthal A, Hermann K, Pilarsky C, Specht T;
PI Schmitt A, Beckmann G, Bruemmendorf T, Kinnemann H, Roepcke S;
PI Xinzhong L, Staub E;
XX
DR WPI; 2004-653386/63.
XX
PT New nucleic acids, and encoded proteins, from prostatic cancer tissue,
PT useful for diagnosis, treatment and in screening for specific binding
PT agents.
XX
PS Claim 2; Page 1567; 1607pp; German.
XX
CC This invention describes novel cytostatic polynucleotide and polypeptide
CC sequences which can be used in a method for diagnosing prostatic cancer
CC or the risk of developing prostatic cancer. Diagnosis is based on
CC determining over transcription or over expression of the sequences in
CC prostatic tissue. Screening for inhibitors of the sequences or detection
CC substances involves a binding assay, any compounds that bind are
CC selected, optionally after deconvolution of mixtures. Detection of a
CC predetermined minimum level of the reporter indicates the presence of
CC tumour cells. Inhibitors can be chosen from antisense oligonucleotides,
CC short-interfering RNA or ribozymes; an organic molecule of molecular
CC weight below 5000, preferably 300, that binds to the polypeptide; an
CC aptamer against the polypeptide; a (monoclonal) antibody (Ab) against the
CC polypeptide, preferably humanised or human; an anti-idiotype, non-human
CC (monoclonal) antibody directed against Ab or any of the above derivatised
CC with a reporter group, cell toxin, immunostimulatory molecules and/or
CC radioisotope. The polynucleotides are identified in human prostatic
CC cancer by differential expression analysis, using DNA microarrays,
CC between normal and tumorous tissues, with (over)expression being detected
CC by quantitative PCR. Analysis of prostatic cancer samples showed that
CC CD24 was upregulated in many of them. Sections of tissue, isolated from
CC prostatic cancer patients, or subjects at risk, were incubated
CC sequentially with anti-human CD4 murine monoclonal antibodies;
CC biotinylated second antibody; streptavidin-conjugated horseradish
CC peroxidase and then diaminobenzidine as colour former (brown). The
CC samples were counterstained with hemalum (blue). Malignant cells stained
CC strongly but non-malignant cells only weakly. In 15 of 63 samples of
CC adenocarcinoma, membrane and cytoplasmic staining was very strong, and
CC lymph node metastases were also stained. ADR65805-ADR66954 represent the
CC polynucleotide and polypeptide sequences used in the method of the
CC invention.
XX
SQ Sequence 544 AA;

Query Match 97.9%; Score 1356; DB 8; Length 544;
Best Local Similarity 98.8%; Pred. No. 5.4e-94;
Matches 249; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||| |||:|:||| 
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPELQLEESCAE 483

Qy        241 AQDGELDGLWTT 252
              ||||||||||||
Db        484 AQDGELDGLWTT 495
```

RESULT 5
ADR66016
ID ADR66016 standard; protein; 544 AA.
XX
AC ADR66016;
XX
DT 02-DEC-2004 (first entry)
XX
DE Human prostatic carcinoma derived protein SEQ ID 212 #1.
XX
KW human; cytostatic; diagnosis; prostatic cancer;
KW differential expression analysis.
XX
OS Homo sapiens.
XX
PN WO2004076614-A2.
XX
PD 10-SEP-2004.
XX
PF 22-FEB-2004; 2004WO-DE000433.
XX
PR 27-FEB-2003; 2003DE-01009985.
PR 14-MAY-2003; 2003DE-01022134.
XX
PA (HINZ/) HINZMANN B.
PA (DAHL/) DAHL E.
PA (ROSE/) ROSENTHAL A.
PA (HERM/) HERMANN K.
PA (PILA/) PILARSKY C.
XX
PI Hinzmann B, Dahl E, Rosenthal A, Hermann K, Pilarsky C, Specht T;
PI Schmitt A, Beckmann G, Bruemmendorf T, Kinnemann H, Roepcke S;
PI Xinzhong L, Staub E;
XX
DR WPI; 2004-653386/63.
XX
PT New nucleic acids, and encoded proteins, from prostatic cancer tissue,
PT useful for diagnosis, treatment and in screening for specific binding
PT agents.
XX
PS Claim 2; Page 607; 1607pp; German.
XX
CC This invention describes novel cytostatic polynucleotide and polypeptide
CC sequences which can be used in a method for diagnosing prostatic cancer
CC or the risk of developing prostatic cancer. Diagnosis is based on
CC determining over transcription or over expression of the sequences in
CC prostatic tissue. Screening for inhibitors of the sequences or detection
CC substances involves a binding assay, any compounds that bind are
CC selected, optionally after deconvolution of mixtures. Detection of a
CC predetermined minimum level of the reporter indicates the presence of
CC tumour cells. Inhibitors can be chosen from antisense oligonucleotides,
CC short-interfering RNA or ribozymes; an organic molecule of molecular
CC weight below 5000, preferably 300, that binds to the polypeptide; an
CC aptamer against the polypeptide; a (monoclonal) antibody (Ab) against the
CC polypeptide, preferably humanised or human; an anti-idiotype, non-human
CC (monoclonal) antibody directed against Ab or any of the above derivatised
CC with a reporter group, cell toxin, immunostimulatory molecules and/or
CC radioisotope. The polynucleotides are identified in human prostatic
CC cancer by differential expression analysis, using DNA microarrays,
CC between normal and tumorous tissues, with (over)expression being detected
CC by quantitative PCR. Analysis of prostatic cancer samples showed that
CC CD24 was upregulated in many of them. Sections of tissue, isolated from
CC prostatic cancer patients, or subjects at risk, were incubated
CC sequentially with anti-human CD4 murine monoclonal antibodies;
CC biotinylated second antibody; streptavidin-conjugated horseradish
CC peroxidase and then diaminobenzidine as colour former (brown). The
CC samples were counterstained with hemalum (blue). Malignant cells stained
CC strongly but non-malignant cells only weakly. In 15 of 63 samples of
CC adenocarcinoma, membrane and cytoplasmic staining was very strong, and
CC lymph node metastases were also stained. ADR65805-ADR66954 represent the
CC polynucleotide and polypeptide sequences used in the method of the
CC invention.
XX
SQ Sequence 544 AA;

```
  Query Match             97.9%;  Score 1356;  DB 8;  Length 544;
  Best Local Similarity   98.8%;  Pred. No. 5.4e-94;
  Matches  249;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 303

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        304 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 363

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        364 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 423

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||| |||:|:||| 
Db        424 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPELQLEESCAE 483

Qy        241 AQDGELDGLWTT 252
              ||||||||||||
Db        484 AQDGELDGLWTT 495
```

RESULT 6
ADR10009
ID ADR10009 standard; protein; 539 AA.
XX
AC ADR10009;
XX
DT 04-NOV-2004 (first entry)
XX
DE Human protein useful for treating neurological disease Seq 3515.
XX
KW human; oligo-capping method; diagnostic marker; gene therapy;
KW osteoporosis; neurological disease; Alzheimer's disease;
KW Parkinson's disease; dementia; short memory; cancer;
KW sense or motor function; emotional reaction; fear response; panic;
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW tranquiliser.
XX
OS Homo sapiens.
XX
PN EP1447413-A2.
XX
PD 18-AUG-2004.
XX
PF 12-FEB-2004; 2004EP-00003145.
XX
PR 14-FEB-2003; 2003JP-00102207.
PR 09-MAY-2003; 2003JP-00131452.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Yamamoto J, Nishikawa T, Isono Y, Sugiyama T, Otsuki T;
PI Wakamatsu A, Ishii S, Nagai K, Irie R;
XX
DR WPI; 2004-583265/57.
DR N-PSDB; ADR08053.

```
XX
PT   New 1995 cDNA, useful for treating osteoporosis, neurological diseases,
PT   Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS   Claim 1; SEQ ID NO 3515; 2686pp; English.
XX
CC   This invention relates to novel, isolated full length human cDNA
CC   molecules and the encoded proteins thereof. Specifically, it refers to
CC   cDNA clones obtained by an oligo-capping method, where none of these
CC   clones are identical to any known human mRNAs. The present invention
CC   describes an immunoassay to identify agonists and antagonists, as well as
CC   antibodies, antisense molecules and siRNAs that can all be used to bind
CC   to and modulate expression of the cDNA molecules. As such, these
CC   molecules are useful for diagnostic markers or therapeutic targets for
CC   the various diseases or morbid states. In particular, they are useful in
CC   gene therapy for treating osteoporosis, neurological disease, Alzheimer's
CC   disease, Parkinson's disease, dementia, short memory and various cancers,
CC   as well as for maintaining equilibrium of sense or motor function, and
CC   for treating emotional reaction, fear response and panic. Accordingly,
CC   they exhibit osteopathic, neuroprotective, nootropic, antiparkinsonian,
CC   cytostatic and tranquiliser activities. This polypeptide is a protein
CC   encoded by a full length human cDNA sequence of the invention. NOTE: This
CC   sequence is not given in the sequence listing of the specification but
CC   can be obtained on CD-ROM from the European Patent Office, Vienna Sub-
CC   office.
XX
SQ   Sequence 539 AA;

  Query Match             97.5%;  Score 1350;  DB 8;  Length 539;
  Best Local Similarity   98.0%;  Pred. No. 1.5e-93;
  Matches  247;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        239 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 298

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        299 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 358

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||:|:||||||||||||||||||||||||||||||||||||||
Db        359 ISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 418

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240
              |||||||||||||||||||||||||||||||||||||||||||||||||| |||:|:|||
Db        419 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPELQLEESCAE 478

Qy        241 AQDGELDGLWTT 252
              ||||||||||||
Db        479 AQDGELDGLWTT 490


RESULT 7
ADD13781
ID   ADD13781 standard; protein; 401 AA.
XX
AC   ADD13781;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Plasmid pBS MbIgG1M/ pBS MhIgG1Mdelta250 protein.
XX
KW   library; transfection; humanized monoclonal antibody; antigen;
KW   T cell receptor; circular.
XX
OS   Synthetic.
OS   Homo sapiens.
OS   Mus sp.
XX
FH   Key             Location/Qualifiers
FT   Region          1. .97
FT                   /note= "human IgG1 CH1"
FT   Region          98. .112
FT                   /note= "human IgG1 hinge"
FT   Region          113. .222
FT                   /note= "human IgG1 CH2"
FT   Region          223. .330
FT                   /note= "human IgG1 CH3"
FT   Region          331. .374
FT                   /note= "murine IgG1 M1"
FT   Region          375. .401
FT                   /note= "murine IgG1 M2"
XX
PN   EP1298207-A1.
XX
PD   02-APR-2003.
XX
PF   01-OCT-2001; 2001EP-00123596.
XX
PR   01-OCT-2001; 2001EP-00123596.
XX
PA   (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
XX
PI   Breitling F,  Moldenhauer G,  Poustka A,  Kuehlwein T;
XX
DR   WPI; 2003-383833/37.
DR   N-PSDB; ADD13780.
XX
PT   Preparing library of protein-producing eukaryotic cells, useful for
PT   producing humanized high-affinity antibodies, comprises introducing
PT   specific recombination signals into chromosomal gene loci and integrating
PT   a variety of DNA sequences.
XX
PS   Example 1; Fig 12B; 75pp; German.
XX
CC   This invention describes a novel method of preparing a library of protein
CC   -producing eukaryotic cells comprising (a) introducing specific
CC   recombination signals into one or two chromosomal gene loci, (b)
CC   Expanding at least one of the modified cells, (c) Transfecting many
CC   different DNA sequences, each flanked by recombination signals, into the
CC   expanded cells and (d) Integrating the DNA sequences into the gene loci
CC   on the basis of the recombination signals and the appropriate
CC   recombinase. The resulting cells express different proteins, each from an
CC   integrated DNA sequence and the proteins are bound to the cell surface.
CC   The method is particularly used to produce libraries of humanized
CC   monoclonal antibodies, for selection of those with affinity for
CC   particular antigens and useful for diagnostic or therapeutic use.
CC   Libraries of T cell receptors may also be prepared. The method produces
CC   libraries of high diversity; provides easy, quick and automatable
CC   selection from a large number of proteins, allows relatively simple
CC   alteration of the expressed gene (e.g. fusion to other protein-coding
CC   sequences), is suitable for large scale protein production and allows
CC   simple verification and characterization of selected cell lines. The
CC   method does not require incorporation of a resistance marker. This
CC   sequence represents the construct MbIgG1M/ pBS MhIgG1Mdelta250 described
CC   in the disclosure of the invention.
XX
SQ   Sequence 401 AA;

  Query Match             97.1%;  Score 1345.5;  DB 7;  Length 401;
  Best Local Similarity   98.4%;  Pred. No. 2.3e-93;
  Matches  251;  Conservative    0;  Mismatches    1;  Indels    3;  Gaps    2;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 157

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              |||||||||||||||||||||||||||||||||||||||||||||||||||| |||
Db        158 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPXEKT 217

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 277
```

```
Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSL-SLSP--GLQLDET 237
              ||||||||||||||||||||||||||||||||||||||||||||||| ||||  |||||||
Db        278 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSSLSPGKGLQLDET 337

Qy        238 CAEAQDGELDGLWTT 252
              ||||||||||||||||
Db        338 CAEAQDGELDGLWTT 352
```

RESULT 8
AAB28692
ID AAB28692 standard; protein; 441 AA.
XX
AC AAB28692;
XX
DT 14-FEB-2001 (first entry)
XX
DE Fc-huAGP-1 (95-281) fusion protein.
XX
KW Human; AGP-1; type II transmembrane protein; cytostatic; antiviral;
KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;
KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;
KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;
KW transplant rejection; cardiovascular disease; arteriosclerosis;
KW Fc-huAGP-1; fusion protein.
XX
OS Homo sapiens.
XX
PN WO200063253-A1.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008004.
XX
PR 16-APR-1999; 99US-00293245.
XX
PA (AMGE-) AMGEN INC.
XX
PI Hsu H, Meng S;
XX
DR WPI; 2000-665240/64.
DR N-PSDB; AAC67832.
XX
PT Fusion protein of AGP-1 protein and an Fc region, used to treat
PT proliferative disorders, immune disorders, and virally-induced disorders.
XX
PS Disclosure; Fig 3; 93pp; English.
XX
CC The present sequence is an AGP-1 fusion protein. AGP-1 is a type II
CC transmembrane protein. The fusion proteins comprise an Fc immunoglobulin
CC region fused to the N-terminal portion of the AGP-1 protein. The fusion
CC proteins can be used to induce apoptosis in a tissue, and to treat
CC proliferative disorders, immune disorders, or virally-induced disorders.
CC The proliferative disorders include cancers, such as breast, prostate,
CC lung or colon cancer. The viral infections include hepatitis, and
CC acquired immunodeficiency syndrome (AIDS), and the immune disorders may
CC be autoimmune disorders or transplant rejection. Cardiovascular diseases
CC such as arteriosclerosis may also be treated. The AGP-1 containing fusion
CC proteins have increased biological activity compared to the soluble AGP-1
CC proteins used in prior art therapies
XX
SQ Sequence 441 AA;

```
  Query Match             91.8%;  Score 1271;  DB 3;  Length 441;
  Best Local Similarity   96.3%;  Pred. No. 1.1e-87;
  Matches  234;  Conservative    3;  Mismatches    6;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         24 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db         84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||   :|| :
Db        204 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKTSEETIST 263

Qy        241 AQD 243
              |:
Db        264 VQE 266
```

RESULT 9
AAB28694
ID AAB28694 standard; protein; 448 AA.
XX
AC AAB28694;
XX
DT 14-FEB-2001 (first entry)
XX
DE Fc-muAGP-1 (99-291) fusion protein.
XX
KW Mouse; AGP-1; type II transmembrane protein; cytostatic; antiviral;
KW antiinflammatory; hepatotropic; antiarteriosclerotic; anti-HIV; HIV;
KW human immunodeficiency virus; apoptosis; proliferative disorder; cancer;
KW hepatitis; acquired immunodeficiency syndrome; AIDS; autoimmune disorder;
KW transplant rejection; cardiovascular disease; arteriosclerosis;
KW Fc-muAGP-1; fusion protein.
XX
OS Mus sp.
XX
PN WO200063253-A1.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008004.
XX
PR 16-APR-1999; 99US-00293245.
XX
PA (AMGE-) AMGEN INC.
XX
PI Hsu H, Meng S;
XX
DR WPI; 2000-665240/64.
DR N-PSDB; AAC67834.
XX
PT Fusion protein of AGP-1 protein and an Fc region, used to treat
PT proliferative disorders, immune disorders, and virally-induced disorders.
XX
PS Disclosure; Fig 5; 93pp; English.
XX
CC The present sequence is an AGP-1 fusion protein. AGP-1 is a type II
CC transmembrane protein. The fusion proteins comprise an Fc immunoglobulin
CC region fused to the N-terminal portion of the AGP-1 protein. The fusion
CC proteins can be used to induce apoptosis in a tissue, and to treat
CC proliferative disorders, immune disorders, or virally-induced disorders.
CC The proliferative disorders include cancers, such as breast, prostate,
CC lung or colon cancer. The viral infections include hepatitis, and
CC acquired immunodeficiency syndrome (AIDS), and the immune disorders may
CC be autoimmune disorders or transplant rejection. Cardiovascular diseases
CC such as arteriosclerosis may also be treated. The AGP-1 containing fusion
CC proteins have increased biological activity compared to the soluble AGP-1
CC proteins used in prior art therapies
XX
SQ Sequence 448 AA;

```
  Query Match             91.4%;  Score 1266;  DB 3;  Length 448;
  Best Local Similarity   94.7%;  Pred. No. 2.7e-87;
  Matches  233;  Conservative    4;  Mismatches    9;  Indels    0;  Gaps    0;
```

```
Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         24 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 83

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 143

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 203

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||    :| :
Db        204 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKTFQDTIST 263

Qy        241 AQDGEL 246
                : :|
Db        264 VPEKQL 269
```

RESULT 10
ADR10259
ID ADR10259 standard; protein; 577 AA.
XX
AC ADR10259;
XX
DT 04-NOV-2004 (first entry)
XX
DE Human protein useful for treating neurological disease Seq 3765.
XX
KW human; oligo-capping method; diagnostic marker; gene therapy;
KW osteoporosis; neurological disease; Alzheimer's disease;
KW Parkinson's disease; dementia; short memory; cancer;
KW sense or motor function; emotional reaction; fear response; panic;
KW osteopathic; neuroprotective; nootropic; antiparkinsonian; cytostatic;
KW tranquiliser.
XX
OS Homo sapiens.
XX
PN EP1447413-A2.
XX
PD 18-AUG-2004.
XX
PF 12-FEB-2004; 2004EP-00003145.
XX
PR 14-FEB-2003; 2003JP-00102207.
PR 09-MAY-2003; 2003JP-00131452.
XX
PA (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI Isogai T, Yamamoto J, Nishikawa T, Isono Y, Sugiyama T, Otsuki T;
PI Wakamatsu A, Ishii S, Nagai K, Irie R;
XX
DR WPI; 2004-583265/57.
DR N-PSDB; ADR08303.
XX
PT New 1995 cDNA, useful for treating osteoporosis, neurological diseases,
PT Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS Claim 1; SEQ ID NO 3765; 2686pp; English.
XX
CC This invention relates to novel, isolated full length human cDNA
CC molecules and the encoded proteins thereof. Specifically, it refers to
CC cDNA clones obtained by an oligo-capping method, where none of these
CC clones are identical to any known human mRNAs. The present invention
CC describes an immunoassay to identify agonists and antagonists, as well as
CC antibodies, antisense molecules and siRNAs that can all be used to bind
CC to and modulate expression of the cDNA molecules. As such, these
CC molecules are useful for diagnostic markers or therapeutic targets for
CC the various diseases or morbid states. In particular, they are useful in
CC gene therapy for treating osteoporosis, neurological disease, Alzheimer's
CC disease, Parkinson's disease, dementia, short memory and various cancers,
CC as well as for maintaining equilibrium of sense or motor function, and
CC for treating emotional reaction, fear response and panic. Accordingly,
CC they exhibit osteopathic, neuroprotective, nootropic, antiparkinsonian,
CC cytostatic and tranquiliser activities. This polypeptide is a protein
CC encoded by a full length human cDNA sequence of the invention. NOTE: This
CC sequence is not given in the sequence listing of the specification but
CC can be obtained on CD-ROM from the European Patent Office, Vienna Sub-
CC office.
XX
SQ Sequence 577 AA;

```
  Query Match             91.3%;  Score 1265;  DB 8;  Length 577;
  Best Local Similarity   91.7%;  Pred. No. 4.4e-87;
  Matches  231;  Conservative   11;  Mismatches   10;  Indels    0;  Gaps    0;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||    || ||||||||||||||||||||||||||||||||||||||||||||:|
Db        277 EPKSCDTPPPCPRCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQF 336

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||:|||:||||||||||||||||||||||||||||||||||||
Db        337 KWYVDGVEVHNAKTKPREEQFNSTFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 396

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||| ||||||||||||||||:|:||||||||||||||||||||||:||||||| |||
Db        397 ISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSGQPENNYNTTP 456

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDETCAE 240
              |:|||||||||||||||||||||:||||||||||| :||||||||| |||:|:|||
Db        457 PMLDSDGSFFLYSKLTVDKSRWQQGNIFSCSVMHEALHNRFTQKSLSLSPELQLEESCAE 516

Qy        241 AQDGELDGLWTT 252
              ||||||||||||
Db        517 AQDGELDGLWTT 528
```

RESULT 11
ADM97493
ID ADM97493 standard; protein; 502 AA.
XX
AC ADM97493;
XX
DT 01-JUL-2004 (first entry)
XX
DE CD1d-IgG-avidin complex IgG1 fragment SEQ ID NO: 16.
XX
KW CD1d complex; cytostatic; antiinflammatory; cancer; autoimmune disease;
KW inflammatory disease; immunosuppressive; antimicrobial; neuroprotective;
KW antidiabetic; antiarthritic; antirheumatic; ophthalmological;
KW gastrointestinal; nephrotropic; dermatological; hepatotropic;
KW beta2-microglobulin.
XX
OS Unidentified.
XX
PN WO2004029206-A2.
XX
PD 08-APR-2004.
XX
PF 26-SEP-2003; 2003WO-US030238.
XX
PR 27-SEP-2002; 2002EP-00405838.
XX
PA (VACC-) VACCINEX INC.
PA (ROBE/) ROBERT B.
PA (DOND/) DONDA A.
PA (CESS/) CESSON V.
PA (MACH/) MACH J.
XX
PI Robert B, Donda A, Cesson V, Mach J, Zauderer M;
XX
DR WPI; 2004-316095/29.
DR N-PSDB; ADM97492.
XX

```
PT   New compound comprising CD1d complexes and an antibody specific for a
PT   cell surface marker, useful for preventing or treating tumors and
PT   autoimmune/inflammatory or infectious diseases, e.g. multiple sclerosis,
PT   diabetes or psoriasis.
XX
PS   Example 4; Page 78; 152pp; English.
XX
CC   The present invention relates to a compound comprising one or more CD1d
CC   complexes and an antibody or its fragment specific for a cell surface
CC   marker. The CD1d complexes comprise a CD1d and a beta2-microglobulin
CC   molecule, and are linked to the antibody or its fragment. The composition
CC   and methods are useful for preventing or treating tumours and
CC   autoimmune/inflammatory or infectious diseases, such as multiple
CC   sclerosis, type I diabetes, ankylosing spondylitis, acute anterior
CC   uveitis, atrophic gastritis, Goodpasture's syndrome, Grave's disease,
CC   Hashimoto's thyroiditis, myasthenia gravis, psoriasis, psoriatic
CC   arthritis, rheumatoid arthritis, systemic lupus erythematosus, systemic
CC   sclerosis, pemphigus vulgaris, pernicious anemia, primary biliary
CC   cirrhosis, ulcerative colitis or autoimmune hepatitis. The present
CC   sequence is a polypeptide used in the exemplification of the invention.
XX
SQ   Sequence 502 AA;

  Query Match             91.2%;  Score 1263;  DB 8;  Length 502;
  Best Local Similarity   92.2%;  Pred. No. 5.3e-87;
  Matches  237;  Conservative    2;  Mismatches   14;  Indels    4;  Gaps    1;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 182

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 242

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 302

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGLQLDET--- 237
              |||||||||||||||||||||||||||||||||||||||||||||||||||||     :
Db        303 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKGGGGSGTG 362

Qy        238 -CAEAQDGELDGLWTTD 253
               |:   | | || |
Db        363 GGGSARKCSLTGKWTND 379


RESULT 12
AAB81972
ID   AAB81972 standard; protein; 581 AA.
XX
AC   AAB81972;
XX
DT   03-JUL-2001  (first entry)
XX
DE   Ganglioside GD2 specific antibody related protein SEQ ID NO: 31.
XX
KW   Ganglioside; GD2; complementation determining region; CDR; antibody;
KW   mouse; cancer.
XX
OS   Synthetic.
XX
PN   WO200123573-A1.
XX
PD   05-APR-2001.
XX
PF   29-SEP-2000; 2000WO-JP006773.
XX
PR   30-SEP-1999;   99JP-00278290.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI   Hanai N,  Shitara K,  Nakamura K,  Niwa R;
XX
DR   WPI; 2001-266163/27.
XX
PT   Human type complementation-determining domain transplanted antibody and
PT   derivatives against ganglioside GD2, useful in diagnosis and therapy of
PT   e.g. tumors, has low antigenicity, little side effects but potent
PT   activity in cancer.
XX
PS   Example 3; Page 111-114; 123pp; Japanese.
XX
CC   The present invention describes an antibody, which can react specifically
CC   with ganglioside GD2, and is transplanted with a human type
CC   complementation-determining domain (CDR), or its fragments. The antibody
CC   and its derivatives are useful in diagnosis and therapy of tumours,
CC   particularly cancer diagnosis. The present sequence is a protein used in
CC   the exemplification of the invention
XX
SQ   Sequence 581 AA;

  Query Match             91.0%;  Score 1260;  DB 4;  Length 581;
  Best Local Similarity   92.5%;  Pred. No. 1.1e-86;
  Matches  235;  Conservative    2;  Mismatches    5;  Indels   12;  Gaps    1;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        217 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 276

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        277 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 336

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        337 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 396

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG--------- 231
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db        397 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKAPTSSSTK 456

Qy        232 ---LQLDETCAEAQ 242
                 |||:    : |
Db        457 KTQLQLEHLLLDLQ 470


RESULT 13
AAB81987
ID   AAB81987 standard; protein; 582 AA.
XX
AC   AAB81987;
XX
DT   03-JUL-2001  (first entry)
XX
DE   Ganglioside GD3 specific antibody related protein SEQ ID NO: 53.
XX
KW   Ganglioside; GD3; complementarity determining region; CDR; antibody;
KW   cancer.
XX
OS   Synthetic.
XX
PN   WO200123432-A1.
XX
PD   05-APR-2001.
XX
PF   29-SEP-2000; 2000WO-JP006774.
XX
PR   30-SEP-1999;   99JP-00278291.
PR   06-APR-2000; 2000JP-00105088.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI   Hanai N,  Shitara K,  Nakamura K,  Niwa R;
XX
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DR   WPI; 2001-266143/27.
XX
PT   New human type complementation-determining region-transplanted antibody
PT   and derivatives against ganglioside GD3, useful in diagnosis and therapy
PT   of e.g. tumors, with low antigenicity, little side effects but potent
PT   activity in cancer.
XX
PS   Claim 41; Page 168-172; 183pp; Japanese.
XX
CC   The present invention describes a monoclonal antibody which can react
CC   specifically with ganglioside GD3. The antibody and its derivatives are
CC   useful in the diagnosis and therapy of tumours, particularly cancer
CC   diagnosis. The present sequence is a protein used in the exemplification
CC   of the invention
XX
SQ   Sequence 582 AA;

  Query Match             91.0%;  Score 1260;  DB 4;  Length 582;
  Best Local Similarity   92.5%;  Pred. No. 1.1e-86;
  Matches  235;  Conservative    2;  Mismatches    5;  Indels   12;  Gaps    1;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 397

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG--------- 231
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db        398 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKAPTSSSTK 457

Qy        232 ---LQLDETCAEAQ 242
                 |||:    : |
Db        458 KTQLQLEHLLLDLQ 471


RESULT 14
AAB81991
ID   AAB81991 standard; protein; 582 AA.
XX
AC   AAB81991;
XX
DT   03-JUL-2001  (first entry)
XX
DE   Ganglioside GD3 specific antibody related protein SEQ ID NO: 57.
XX
KW   Ganglioside; GD3; complementarity determining region; CDR; antibody;
KW   cancer.
XX
OS   Synthetic.
XX
PN   WO200123432-A1.
XX
PD   05-APR-2001.
XX
PF   29-SEP-2000; 2000WO-JP006774.
XX
PR   30-SEP-1999;   99JP-00278291.
PR   06-APR-2000; 2000JP-00105088.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI   Hanai N,  Shitara K,  Nakamura K,  Niwa R;
XX
DR   WPI; 2001-266143/27.
XX
PT   New human type complementation-determining region-transplanted antibody
PT   and derivatives against ganglioside GD3, useful in diagnosis and therapy
PT   of e.g. tumors, with low antigenicity, little side effects but potent
PT   activity in cancer.
XX
PS   Claim 39; Page 175-179; 183pp; Japanese.
XX
CC   The present invention describes a monoclonal antibody which can react
CC   specifically with ganglioside GD3. The antibody and its derivatives are
CC   useful in the diagnosis and therapy of tumours, particularly cancer
CC   diagnosis. The present sequence is a protein used in the exemplification
CC   of the invention
XX
SQ   Sequence 582 AA;

  Query Match             91.0%;  Score 1260;  DB 4;  Length 582;
  Best Local Similarity   92.5%;  Pred. No. 1.1e-86;
  Matches  235;  Conservative    2;  Mismatches    5;  Indels   12;  Gaps    1;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        218 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 277

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        278 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 337

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        338 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 397

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG--------- 231
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db        398 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKAPTSSSTK 457

Qy        232 ---LQLDETCAEAQ 242
                 |||:    : |
Db        458 KTQLQLEHLLLDLQ 471


RESULT 15
AAB83156
ID   AAB83156 standard; protein; 583 AA.
XX
AC   AAB83156;
XX
DT   02-JUL-2001  (first entry)
XX
DE   Ganglioside GM2 antibody-related protein #1.
XX
KW   Ganglioside; GM2; antibody; cytostatic; cytotoxic; cancer.
XX
OS   Unidentified.
XX
PN   WO200123431-A1.
XX
PD   05-APR-2001.
XX
PF   29-SEP-2000; 2000WO-JP006775.
XX
PR   30-SEP-1999;   99JP-00278292.
XX
PA   (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI   Hanai N,  Nakamura K,  Niwa R;
XX
DR   WPI; 2001-266142/27.
XX
PT   Monoclonal antibodies against ganglioside GM2 combined with drugs,
PT   radioisotopes or proteins for treatment and diagnosis of cancer.
XX
PS   Claim 43; Page 61-65; 80pp; Japanese.
XX
CC   The present invention relates to derivatives of an antibody against
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CC   ganglioside GM2. The antibody may be a monoclonal antibody or its
CC   fragments. The antibody is combined with a radioactive isotope, protein
CC   or small drug in the treatment and diagnosis of cancer
XX
SQ   Sequence 583 AA;

  Query Match             91.0%;  Score 1260;  DB 4;  Length 583;
  Best Local Similarity   92.5%;  Pred. No. 1.1e-86;
  Matches  235;  Conservative    2;  Mismatches    5;  Indels   12;  Gaps    1;

Qy          1 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF 278

Qy         61 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT 338

Qy        121 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 ISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTP 398

Qy        181 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG--------- 231
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 PVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGKAPTSSSTK 458

Qy        232 ---LQLDETCAEAQ 242
                 |||:    : |
Db        459 KTQLQLEHLLLDLQ 472


Search completed: March  7, 2005, 07:13:03
Job time : 109.895 secs
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